

17th Ceos Plenary



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Under Secretary of Commerce for Oceans and Atmosphere | NOAA

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The Broadmoor, Colorado Springs

Main points

Importance of CEOS

- CEOS & IGOS
 - Test-bed for concepts
 - Key role in new directions for advancing Earth observations

Advancing the goals of the Earth Observation Summit

- path forward with work of the GEO

Point to long-term priorities where CEOS can help

- Research to Operations
- Data management & access



Role of CEOS to EO Community

CEOS Team for 5 key areas that mirrored World Summit for Sustainable Development (WSSD) objectives:

- Education, Training and Capacity Building;
- Water Resource Management;
- Disaster Management and Conflicts;
- Climate Change; and
- Global Mapping, Land-use Monitoring and Geographic Information Systems

CEOS Plenary last year - important steps for sustainable development:

- Strategies and partnerships – ie. TIGER
- development of Capacity Building Principles
- African Advisory Group

Two successful CEOS workshops in 2003

- Stellenbosch, South Africa, and Rabat, Morocco.



Role of CEOs to EO Community

Value of Earth data for environmental investigation...

- Geographic Information for Sustainable Development (GISD) initiative
- food security
- sustainable agriculture
- natural resource management
- disaster mitigation
- poverty alleviation



Earth Observation—Integration

Achieving full benefits of earth observations requires in situ & satellite remote sensing communities coming together

- Ultimate goal = products & services for public, research, commercial use

Earth systems are complex - ask how parts fit together and function as whole

- Need well-connected global integrated information & data management system

Social, Economic, and Science Imperatives

- Where's carbon going?
- Drought & Water - 1 billion lack access to safe drinking water, 2 billion lack sanitation
- 95% of U.S. trade is transported by ship



Earth Observation—Integration

Requires full system planning – “end to end”

- from identifying and connecting the platforms
- to assuring data receipt systems
- to processing and distribution of data
- to assuring open access to the data
- to providing services and products



CEOS Inputs

Stepping Stones to Baveno & Tokyo

- Architecture – end-to-end approach: data, products & services, Telecomm.
- Data Utilization – identify barriers & strategies
- Capacity Building – create a solid market-base, high-level political support
- User Requirements & Outreach – improve dialogue, new Users
- International Cooperation – new models, strategies

Prioritization process important

- System components
- Initial objectives
- Management & organizational principles

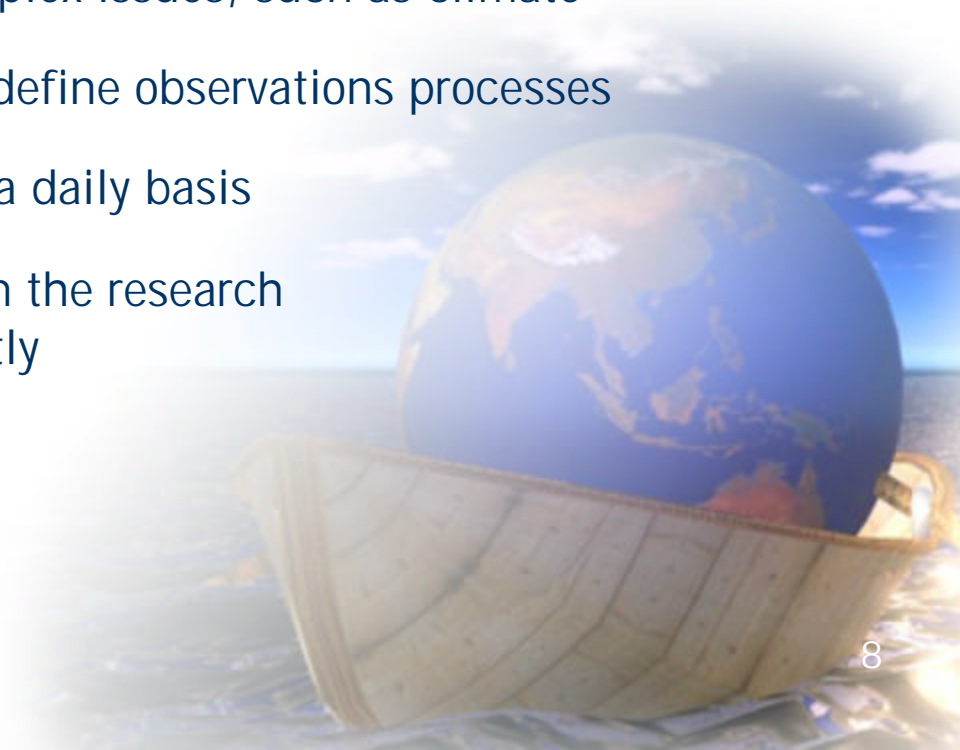


Research to Operations

CEOS can help – bring value-added; global & organizational long term issue

NOAA & NASA study – National Research Council

- Systems approach to development
 - Missions - models - decision support systems for decision-making
- Ask right questions to diagnose complex issues, such as climate
- New sensors and technologies help define observations processes
- Meet societal information needs on a daily basis
- Need to move new technologies from the research to operations quicker, more efficiently



Data Management & Computing

CEOS can help – we cannot be in business without these pieces

- Satellite & *in situ* monitoring system investment requires data management & high-performance computing investment
- 150+ satellites projected over next 15 years – data stream
 - Existing capacities need to double/triple in short period
- Japan's Earth Simulator new benchmark for supercomputing
- Full, open data & information sharing between nations
- Solve long-term problems – continuity of data streams, calibration, time-series data
- Research community essential



CEOS Integral to EO Progress

Importance of CEOS

- Strong record of success – technical & organizational

Advancing the goals of the Earth Observation Summit

- Space component essential for success – integration with In Situ critical
- CEOS experience & expertise can make the difference

CEOS can help with Future Challenges

- Research to operations
- Data management & access
- User Connection
- Prioritization

